

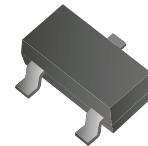
## CDBT-54/S/C/A-HF

**Reverse Voltage: 30 Volts**

**Forward Current: 200 mA**

**RoHS Device**

**Halogen free**



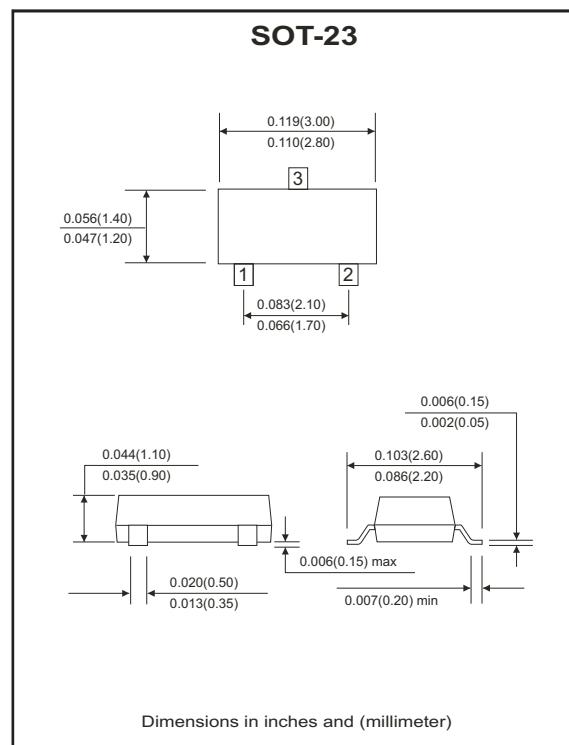
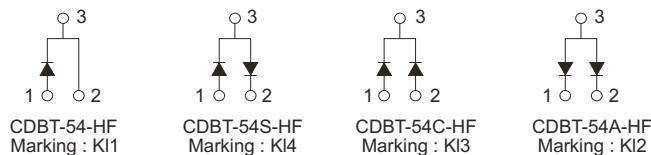
### Features

- Design for mounting on small surface.
- High speed switching application, circuit protection.
- Low forward voltage drop.

### Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.008 grams

### Circuit diagram



### Maximum Ratings and Electrical Characteristics

(at  $T_a=25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Conditions	Value	Units
Repetitive peak reverse voltage	$V_{RRM}$		30	V
Reverse voltage	$V_R$		30	V
Forward current	$I_F$		200	mA
Peak surge forward current	$I_{FSM}$	$T < 1.0 \text{ sec}$	0.6	A
Power dissipation	$P_D$		200	mW
Maximum forward voltage	$V_F$	@ $I_F=0.1\text{mA}$ @ $I_F=1\text{mA}$ @ $I_F=10\text{mA}$ @ $I_F=30\text{mA}$ @ $I_F=100\text{mA}$	0.24 0.32 0.40 0.50 1.00	V
Maximum reverse current	$I_R$	@ $V_R=25\text{V}$	2	$\mu\text{A}$
Maximum reverse recovery time	$T_{rr}$	$I_F=I_R=10\text{mA}, R_L=100\Omega$	5	nS
Maximum diode capacitance	$C_J$	$V_R=1\text{V}, f=1.0\text{MHz}$	10	pF
Maximum junction temperature	$T_J$		125	$^\circ\text{C}$
Storage temperature	$T_{STG}$		-65 to +125	$^\circ\text{C}$

# Small Signal Schottky Diodes

**Comchip**  
SMD Diode Specialist

## RATING AND CHARACTERISTIC CURVES (CDBT-54/S/C/A-HF)

Fig.1 - Forward Characteristics

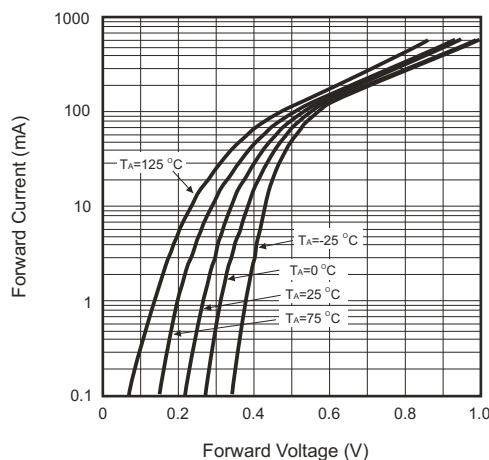


Fig.2 - Reverse Characteristics

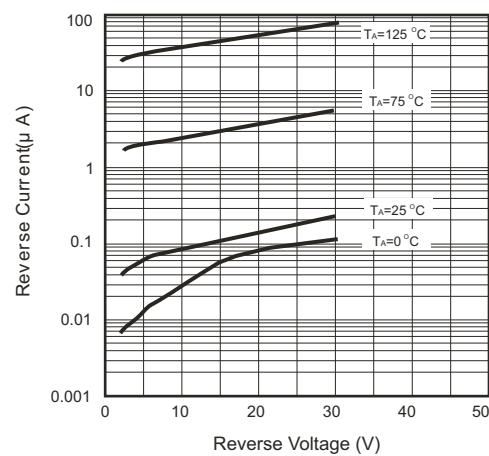


Fig.3 - Capacitance Between Terminals Characteristics

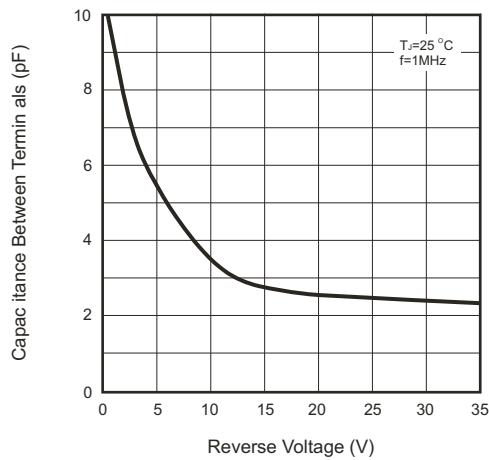


Fig.4 - Power Derating Curve

